

What is claimed is:

1. A method of manufacturing a ceramic thick-film printed circuit board, comprising the steps of:

forming a printed pattern on a substrate; and

5 firing the printed pattern,

wherein a layer comprising a resin having a thickness ranging from 0.15 to 2  $\mu\text{m}$  is formed on the surface of the substrate prior to the printed pattern forming step.

2. The method of manufacturing a ceramic thick-film printed circuit board of claim 1, wherein the thickness of the layer is controlled by a mixing ratio of resins having a same chemical structure and different molecular weights.

3. The method of manufacturing a ceramic thick-film printed circuit board of claim 1, wherein a temperature increasing rate ranges from 80 to 120  $^{\circ}\text{C}/\text{min}$  in the firing step.

4. The method of manufacturing a ceramic thick-film printed circuit board of claim 3, wherein the temperature increasing rate is adjusted according to a molecular weight of the resin.

5. The method of manufacturing a ceramic thick-film printed circuit board of claim 1, wherein a fired film has a thickness ranging from 5 to 22  $\mu\text{m}$ .

6. The method of manufacturing a ceramic thick-film printed circuit board of claim 5, wherein the thickness of the fired film is adjusted according to a molecular weight of a binder resin contained in a printing paste.

7. The method of manufacturing a ceramic thick-film printed circuit board of claim 1, wherein a printing paste having a solvent content ranging from 8 to 25 wt% is used in the printed pattern forming step.

8. The method of manufacturing a ceramic thick-film printed circuit

board of claim 7, wherein the solvent content of the printing paste is adjusted according to a molecular weight of the resin.

9. The method of manufacturing a ceramic thick-film printed circuit board of claim 1, wherein the resin layer has an average surface roughness Ra ranging from 0.15 to 0.5  $\mu\text{m}$  or a maximum surface roughness Rmax ranging from 1.5 to 5  $\mu\text{m}$  according to a measuring method of Japanese Industrial Standards (JIS) B0601.

10. The method of manufacturing a ceramic thick-film printed circuit board of claim 1, wherein one of the resin layer and an emulsion of a screen mask used in the printed pattern forming step has an average surface roughness Ra ranging from 0.25 to 0.5  $\mu\text{m}$  or a maximum surface roughness Rmax ranging from 2 to 5  $\mu\text{m}$ .